

Key Instant Recall Facts

Year 6 – Term 1

I can recall/derive pairs of numbers which total 1 up to three decimal places using knowledge of previous number bond understanding

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Example:

$$0.642 + \underline{\quad} = 1$$

0.642 has 6 thousandths, 4 hundredths and 2 tenths.

To make 1, I will need 3 thousandths, 5 hundredths and 8 ones.

If I add 3 thousandths to my 6 thousandths, I will have 9 thousandths

If I add 5 hundredths to my 4 hundredths, I will have 9 hundredths.

If I add 8 tenths to my 2 tenths, I will have 10 tenths.

$$\text{So, } 0.642 + 0.358 = 1$$

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Connect – this builds on their knowledge of past years when your child learned their number bonds to 100 and to 1000.



Key Instant Recall Facts

Year 6 – Term 2

I can recall/derive pairs of numbers which total 1 up to three decimal places

I can derive related decimal products from known table facts using only two transformations

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Order of Operations

| | | |
|----------|-----------------------|--|
| B | Brackets | $10 \times (4 + 2) = 10 \times 6 = 60$ |
| I | Indices | $5 + 2^2 = 5 + 4 = 9$ |
| D | Division | $10 + 6 \div 2 = 10 + 3 = 13$ |
| M | Multiplication | $10 - 4 \times 2 = 10 - 8 = 2$ |
| A | Addition | $10 \times 4 + 7 = 40 + 7 = 47$ |
| S | Subtraction | $10 \div 2 - 3 = 5 - 3 = 2$ |

If I know THIS, then I can work out THAT

Now you know all your times table facts, we can use them to work out products of other multiplications.

e.g. If I know $4 \times 8 = 32$, then I can work out 0.4×0.8 is 0.32 as 0.8 is ten times smaller than 8 and 0.4 is ten times smaller than 4.

Using table facts in this way is extremely efficient.

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Key Instant Recall Facts

Year 6 – Term 3

I can recall more percentage and decimal equivalents

I can derive unknown decimal numbers when given the products

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Learn these by heart

$$\frac{3}{4} = 0.75 = 75\%$$

$$\frac{3}{5} = 0.6 = 60\%$$

$$\frac{1}{10} = 0.1 = 10\%$$

*Approximations below (as they are
recurring decimals):*

$$\frac{1}{3} = 0.333 \dots = 33.3\%$$

$$\frac{2}{3} = 0.666 \dots = 66.6\%$$

*If I know THIS, then I can work
out THAT*

*Now you know all your times
table facts, we can use them to
work out products of other
multiplications.*

e.g.

$$\underline{\hspace{1cm}} \times 3 = 2.1$$

$$0.4 \times \underline{\hspace{1cm}} = 3.6$$

$$4.8 \div \underline{\hspace{1cm}} = 0.8$$

$$\underline{\hspace{1cm}} \div 0.6 = 0.7$$

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Matching Games can really help your child to build up speed of recall, especially those equivalent fractions, decimals and percentages.



Key Instant Recall Facts

Year 6 – Term 4

I can recall names and properties of all 4 types of triangles.

I can recall names and properties of all 6 types of quadrilaterals.

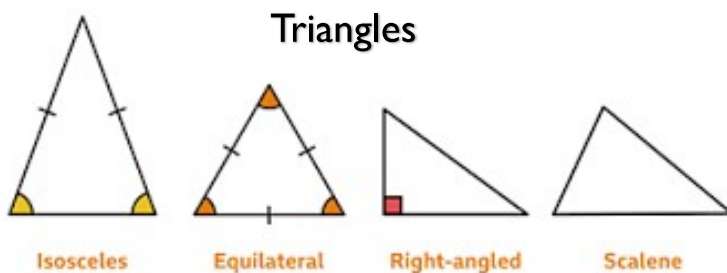
By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Top Tips

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Examples – children sometimes struggle to name types of shapes because they have not been exposed to all the different ways they could look.

Properties – Knowing these properties will really help your child to accurately name 2D shapes: *angles (including right angles); equal side lengths (congruent); opposite; parallel; perpendicular.*



| Quadrilateral | Properties |
|--|---|
| <div style="text-align: center;"> <small>parallelogram</small> </div> | A quadrilateral with two pairs of parallel sides |
| <div style="text-align: center;"> <small>rhombus</small> </div> | A parallelogram with all sides equal in length |
| <div style="text-align: center;"> <small>rectangle</small> </div> | A parallelogram with four right angles |
| <div style="text-align: center;"> <small>square</small> </div> | A rectangle with all sides equal in length |
| <div style="text-align: center;"> <small>trapezoid</small> </div> | A quadrilateral with one pair of parallel sides. If two sides are equal, it is an isosceles trapezoid. |
| <div style="text-align: center;"> <small>kite</small> </div> | A quadrilateral with two pairs of equal adjacent sides. |



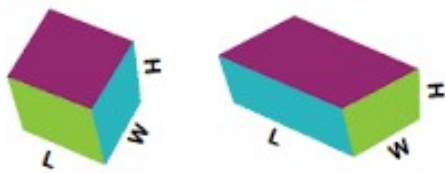
Key Instant Recall Facts

Year 6 – Term 5

I know the formula for finding the volume of cuboids

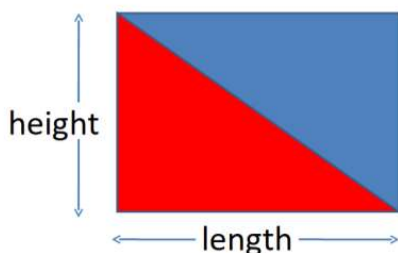
I know the formulae for finding the area of triangles and parallelograms

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.



Volume of a cube / cuboid
= length x height x width

$$V = L \times H \times W$$



Volume of a cuboid:

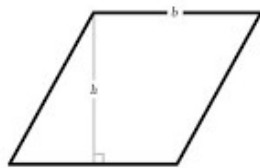
$$l \times w \times h$$

Volume is measured in
cubic units

Area of a triangle:

$$\frac{1}{2} \times l \times h$$

$$A = bh$$



b: base h: height

Area of a parallelogram:

$$b \times h$$

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Formulae – Learning these will help your child to focus on problem solving and reasoning. It gives a simple way of working out unknowns.



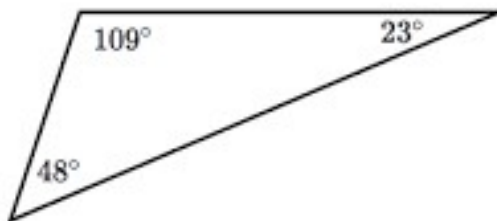
Key Instant Recall Facts

Year 6 – Term 6

I know the names of parts of circles

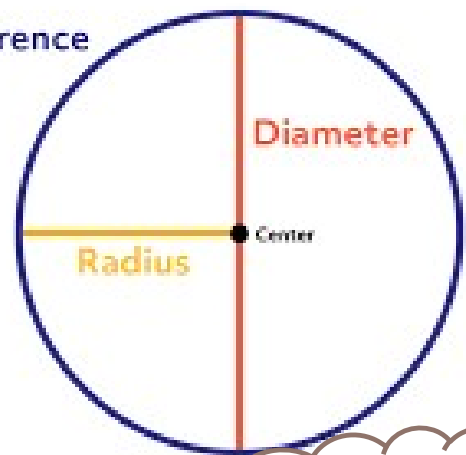
I know that angles inside triangles total 180° and inside quadrilaterals total 360°

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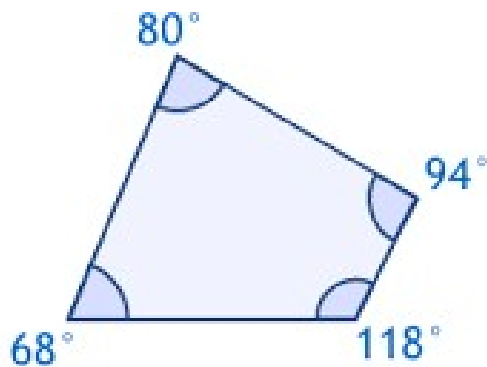


$$109^\circ + 23^\circ + 48^\circ = 180^\circ$$

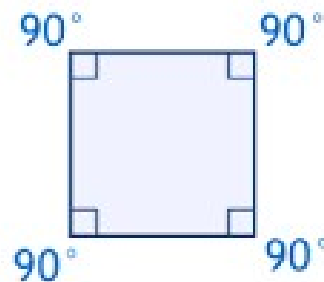
Circumference



The diameter is twice as long as the radius...



$$68^\circ + 118^\circ + 94^\circ + 80^\circ = 360^\circ$$



$$4 \times 90^\circ = 360^\circ$$

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Interior angles – Knowing these facts will help your child to calculate unknown angles inside triangles and four-sided shapes (quadrilaterals).